

Work Order ID 146629

Thursday, May 19, 2016 2:59:26 PM

146629

Page 1

Item ID: D119-796-021

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/23/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MLS Date: **MAY 25 2016** Tooling: _____ Date: _____Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D119-796-021	A
--------------	---

IIN-D119-796	E
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DAS
6
9-89

0.00

JUN 17 2016MLS 16-06-23

100

Pick Kit

100

Packaging

Memo

0.02

Packaging

Photocopy bluefile and create labels as per PPP D119-796-021 . chg 003/ D119-646-041 paperwork

110

0.00

110

HandFinish

Memo

6.97

Hand Finishing

ASSEMBLE AS PER DWG AND NOTES 8,9,10,11

ASSEMBLE WITH PROSEAL BATCH: 134500

2-INSTALL DECAL D2729-4

DAS
36
9-89IX 16/06/23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Work Order ID 146629

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146629

Page 2

Item ID: D119-796-021

Accept

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Stop ***NS2***

Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/23/2016 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00				/			
120									DAS
QC	Memo	0.50							38
Quality Control									JUN 27 2016
130	Identify as per dwg & Stock Location: <i>ship</i>	0.00							
130									
Packaging	Memo	0.25							
Packaging	Identify and pack for shipping as per PPP D119-796-021								
	Location: _____								
	PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.10							
Quality Control									

16/6/27 *[Signature]*
Em 16/06/27.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	☐	Past Due ☐					

Picklist Print

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Page 1

Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 15-05-012 JLM VERIFIED BY:DD IPP
REV:B 15.08.25 AS PER IIN REV.E DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D119-646-041		Manufactured	No			110	Each	0.0000	2	2			
D119-646-041													
Replacement Skidtube with Wearpads, Fits LH or RH													
D119-796-151		Manufactured	No			110	Each	1.0000	1	1			
D119-796-151													
FWD Crosstube Installation with Step (no hardware)													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				FG			1						
					141084		1						
D119-796-251		Manufactured	No			110	Each	1.0000	1	1			
D119-796-251													
AFT Crosstube Installation with Step (no hardware)													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				FG			1						
					143549		1						
D2652		Manufactured	No			110	Each	175.0000	48	48			
D2652													
Bushings													
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				FG			45						
					31985		45						
				ST009			130						
					141609		130						

B146618 (1X) B144509 (1X)

16/06/23

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16/06/23

B146654 (1X)

**

16/06/23

B146639 (1X)

**

145958

DMS

6

8-89

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
				OTHER : _____							

Picklist Print

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Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3407-041

Manufactured No

110

Each

7.0000

2

2

D3407-041

Tow Ring

145440

Location

Loc Qty

Loc Code

st530

7

145210

7

D3417-5

Manufactured No

110

Each

137.0000

4

4

D3417-5

Washer

Location

Loc Qty

Loc Code

ST035

16

140183

16

ST038A

121

145908

121

D3456-1

Manufactured No

110

Each

101.0000

2

2

D3456-1

Washer

Location

Loc Qty

Loc Code

FG

7

25701

7

ST038

44

141989

44

ST038A

50

144158

50

DAS

6

9-89

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Thursday, May 19, 2016 2:59:25 PM

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Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3672-3

Manufactured No

110 Each

997.0000

48

48

D3672-3

Washer, Phenolic

DAS
6
8-89

Location

Loc Qty

Loc Code

FG

100

133083

52

134449

48

FP001

213

132639

213

ST049

184

139583

184

ST051A

500

142571

500

48

48

D3672-7

Manufactured No

110 Each

982.0000

48

48

D3672-7

Washer, Phenolic

DAS
6
8-89

Location

Loc Qty

Loc Code

FG

40

129987

25

133986

15

ST049

442

134786

442

ST051A

500

142572

500

48

2

D3883-1

Manufactured No

110 Each

0.0000

2

2

D3883-1

Saddle, Outboard LH

DAS
6
8-89

142477

144926

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

Picklist Print

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Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

D3883-2 Manufactured No

110 Each 19.0000 2 2

D3883-2

Saddle, Outboard RH

Location

Loc Qty

Loc Code

ST404

19

142486

12

142792

7

DAS
6
8-89

D3884-1 Manufactured No

110 Each 27.0000 2 2

D3884-1

Saddle, Inboard LH

Location

Loc Qty

Loc Code

ST404

27

142461

10

142674

10

144928

7

DAS
6
8-89

D3884-2 Manufactured No

110 Each 19.0000 2 2

D3884-2

Saddle, Inboard RH

Location

Loc Qty

Loc Code

ST404

19

142471

12

142761

7

DAS
6
8-89

D3886-041 Manufactured No

110 Each 10.0000 4 4

D3886-041

Lug Assembly

Location

Loc Qty

Loc Code

ST528

10

142776

10

DAS
6
8-89

142775X3

1

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process								
Misidentified ☐	☐ Past Due	OTHER : _____							

Picklist Print

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Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

AN3C46A

Purchased

No

110

Each

356.0000

8

8

AN3C46A

Bolt

Location

Loc Qty

Loc Code

FG

10

122843

10

OVER002

280

134795

70

M133917

70

M134591

70

M134794

70

ST346

66

M132522

34

M133332

32

AN3C50A

Purchased

No

110

Each

69.0000

16

16

AN3C50A

Bolt

Location

Loc Qty

Loc Code

OVER002

50

M134494

50

ST346

19

M133606

17

M133842

2

AN4C6A

Purchased

No

110

Each

305.0000

24

24

AN4C6A

Bolt

Location

Loc Qty

Loc Code

FG

14

103344

4

121657

10

ST345

291

m134502

291

JUN 17 2016

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Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Thursday, May 19, 2016 2:59:25 PM

Page 6

Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

MS21043-3

Purchased

No

110

Each

827.0000

24

24

MS21043-3

Nut

Location

Loc Qty

Loc Code

FG	80	
103691	80	
FP001	11	
m130673	11	
GA	363	
m133990	363	
ST302	267	
m134502	267	
ST304	106	
m131340	106	

24

DAS
6
9-89

MS21043-4

Purchased

No

110

Each

1,070.000

26

26

MS21043-4

Nut

Location

Loc Qty

Loc Code

FG	40	
104603	40	
GA	41	
m132803	41	
OVER007	300	
m134502	300	
ST302	689	
m133769	12	
m134249	77	
m134634	300	
m134754	300	

132382 X24
128798 X2

DAS
6
9-89
JUN 17 2016
JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER :							
Misidentified ☐	☐	Past Due								

Picklist Print

Thursday, May 19, 2016 2:59:25 PM

Page 7

Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

MS21043-5

Purchased

No

110

Each

192.0000

8

8

MS21043-5

Nut

DAG

6

8-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

96

m132382

9

m134502

87

MS21250-05048

Purchased

No

110

Each

38.0000

8

8

MS21250-05048

Bolt (use MS21250-05-048)

DAG

6

8-89

Location

Loc Qty

Loc Code

ST295

38

m133694

38

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : .		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER :									

Picklist Print

Thursday, May 19, 2016 2:59:25 PM

Page 8

Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

110

Each

4,395.000

24

24

NAS1149C0332R

WASHER

Location

Loc Qty

Loc Code

FP001

2048

m132262

4

m132930

1004

m134063

26

m134073

128

m134574

886

GA

173

m133284

173

ST266

2174

m134474

74

m134654

100

m134736

2000

DAS
6
8-89

NAS1149C0432R

Purchased

No

110

Each

1,641.000

48

48

NAS1149C0432R

WASHER

Location

Loc Qty

Loc Code

GA

1320

m125807

427

m134676

893

ST266

321

m134073

321

DAS
6
8-89

JUN 17 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	Past Due ☐							

Picklist Print

Thursday, May 19, 2016 2:59:25 PM

Page 9

Work Order ID: 146629

146629

Parent Item: D119-796-021

D119-796-021

Parent Item Name: AW119 Standard Landing Gear Assembly - Standard OEM Protection

Start Date: 5/26/2016

Required Date: 6/23/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0532R

Purchased

No

110

Each

409.0000

16

16

NAS1149C0532R

WASHER

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

60

116513

60

ST266

349

m133031

149

m134756

200

JUN 17 2016

1p

139x89x35crate

Purchased

No

110

Each

5.0000

1

1

139x89x35crate

Agusta Crate

MS21920-28

Purchased

No

Each

35.0000

2

MS21920-28

Clamp

DAS

6

9-89

Location

Loc Qty

Loc Code

FG

1

105884

1

LG051

1

M132169

1

LG057

33

M134130

2

M134590

31

JUN 17 2016

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

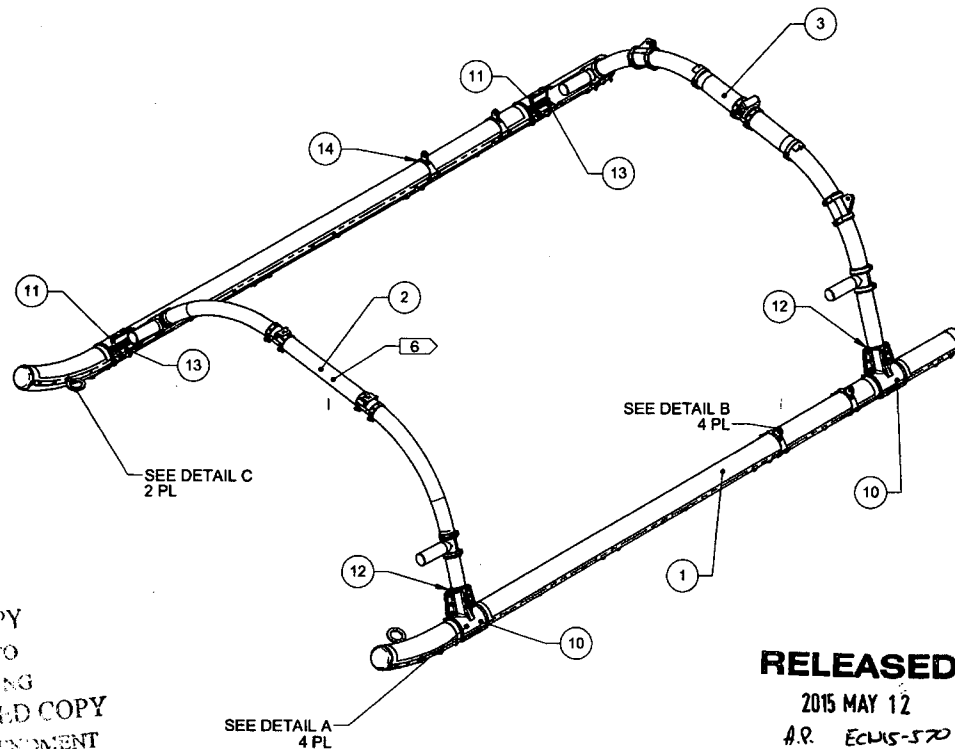
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

ITEM	QTY -021	P/N	DESCRIPTION
	X	D119-796-021	STD GEAR WITH STD WEARPADS
1	2	D119-646-041	STD SKIDTUBE WITH STD WEARPADS
2	1	D119-796-151	XTUBE ASSY (AW119 MKII FWD)
3	1	D119-796-251	XTUBE ASSY (AW119 MKII AFT)
4	48	D2652	BUSHING
5	2	D3407-041	TOW RING
6	4	D3417-5	WASHER
7	2	D3456-1	WASHER
8	48	D3672-3	PHENOLIC WASHER
9	48	D3672-7	PHENOLIC WASHER
10	2	D3883-1	SADDLE, OUTBOARD LH
11	2	D3883-2	SADDLE, OUTBOARD RH
12	2	D3884-1	SADDLE, INBOARD LH
13	2	D3884-2	SADDLE, INBOARD RH
14	4	D3886-041	LUG ASSEMBLY
15	8	AN3C46A	BOLT
16	16	AN3C50A	BOLT
17	24	AN4C6A	BOLT
18	24	MS21043-3	NUT, SELF-LOCKING
19	26	MS21043-4	NUT, SELF-LOCKING
20	8	MS21043-5	NUT, SELF-LOCKING
21	8	MS21250-05048	BOLT
22	24	NAS1149C0332R	WASHER
23	48	NAS1149C0432R	WASHER
24	16	NAS1149C0532R	WASHER



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 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 146629 MWS
 160525

RELEASED

2015 MAY 12

A.P. ECUS-570

D119-796-021 STD GEAR WITH STD WEARPADS

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: N/A
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: INSTALL D2729-4 RED DECAL IN LOCATION SHOWN
- 7) WEIGHT: 122.7 LBS

APPROVED	A	NEW ISSUE		AP	15.04.01
	REV.	DESCRIPTION		BY	DATE
	DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
	DRAWN	AP			
	CHECKED	AJS	DRAWING NO.		REV. A
	MFG. APPR.	DD	D119-796-021		SHEET 1 OF 4
APPROVED		HS	TITLE		SCALE
DE APPR.		DS	STD GEAR WITH STD WEARPADS		NTS
DATE		15.04.01		COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

D

C

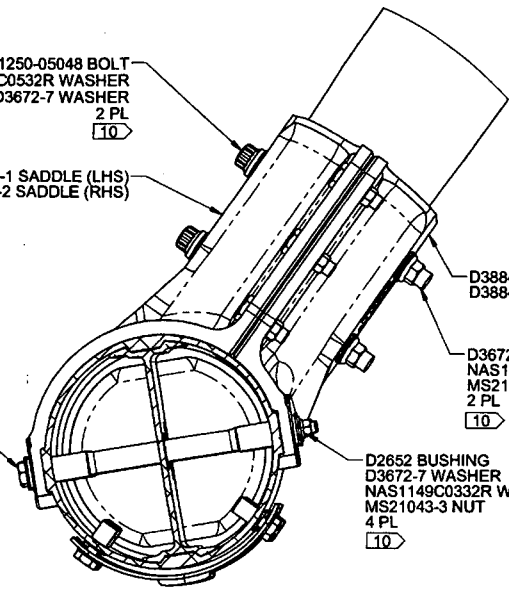
B

A

MS21250-05048 BOLT
NAS1149C0532R WASHER
D3672-7 WASHER
2 PL
10

D3883-1 SADDLE (LHS)
D3883-2 SADDLE (RHS)

AN3C50A BOLT
D3672-7 WASHER
D2652 BUSHING
4 PL
10



DETAIL A
4 PL



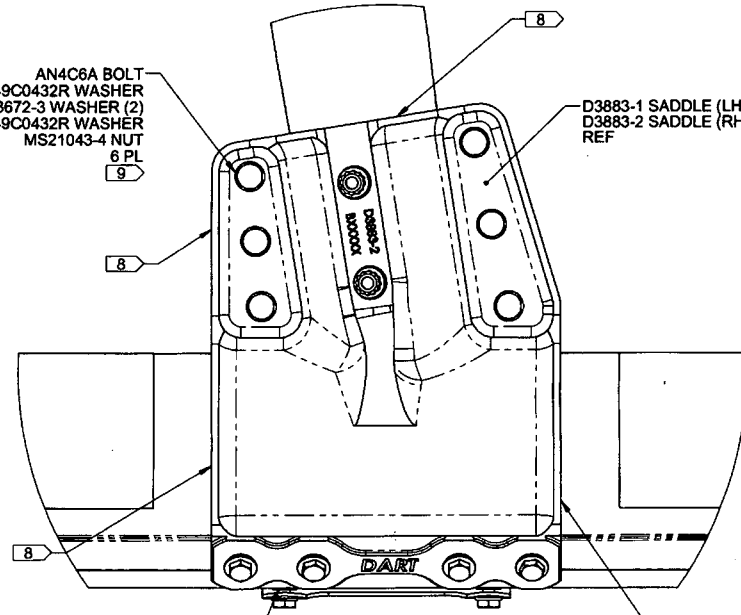
AN4C6A BOLT
NAS1149C0432R WASHER
D3672-3 WASHER (2)
NAS1149C0432R WASHER
MS21043-4 NUT
6 PL
9

D3883-1 SADDLE (LHS)
D3883-2 SADDLE (RHS)
REF

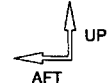
D3884-1 SADDLE (LHS)
D3884-2 SADDLE (RHS)

D3672-7 WASHER
NAS1149C0532R WASHER
MS21043-5 NUT
2 PL
10

D2652 BUSHING
D3672-7 WASHER
NAS1149C0332R WASHER
MS21043-3 NUT
4 PL
10



DETAIL A



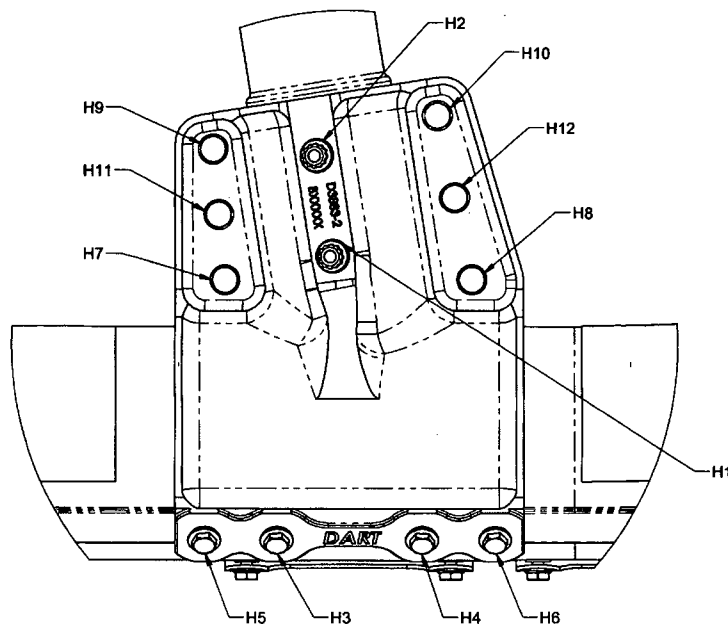
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) APPLY A CONTINUOUS BEAD OF SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT IN THE LOCATIONS SHOWN INCLUDING THE FOLLOWING:
 - A) ALONG SADDLE/CROSSTUBE INTERFACE
 - B) BETWEEN THE SADDLE FLANGES
 - C) ALONG SADDLE/SKIDTUBE INTERFACE
- 9) LIGHTLY TIGHTEN ALL BOLTS IN THE NUMERICAL ORDER SPECIFIED ON SHEET 3, THEN TIGHTEN TO SPECIFIED TORQUE IN TABLE 1.
- 10) INSTALL WET WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 11) ALL NUTS TO BE INSTALLED ON THE INBOARD SIDE

RELEASED
2015 MAY 12
A.P. EEW 15-570

APPROVED	DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AP		
	CHECKED	AJS	DRAWING NO.	REV. A
	MFG. APPR.	DD	D119-796-021	SHEET 2 OF 4
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
DATE		15.04.01	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



SUPPLEMENTAL VIEW - TORQUE SEQUENCE

TABLE 1: TORQUE SEQUENCE AND MAX TORQUE

TORQUE SEQUENCE	PART NUMBER	TORQUE
H1	MS21250-05048	66-85 IN-LBS (7.3 - 9.6 N-m)
H2	MS21250-05048	66-85 IN-LBS (7.3 - 9.6 N-m)
H3	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H4	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H5	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H6	AN3C50A	15-25 IN-LBS (1.7 - 9.6 N-m)
H7	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H8	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H9	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H10	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H11	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)
H12	AN4C6A	50-70 IN-LBS (5.7 - 7.9 N-m)

RELEASED

2015 MAY 12
A.R. EN 15-570

APPROVED

DESIGN	AP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 3 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
DATE	15.04.01	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

D

D3407-041 TOW RING
D3417-5 WASHER

9

INBOARD

C

B

D3417-5 WASHER
D3456-1 WASHER
MS21043-4 NUT

8 9 11

DETAIL C
2 PL

D

D3886-041 LUG ASSEMBLY

9

INBOARD

D2652 BUSHING
NAS1149C0332R WASHER
MS21043-3 NUT
2 PL

8 9 10

C

B

D2652 BUSHING
AN3C46A BOLT
2 PL

8 9 10

DETAIL B
4 PL

RELEASED

2015 MAY 12

A.P. ECU15-570

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: N/A
- 8) INSTALL WET WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 9) APPLY FAY SEAL AND FILLET SEAL USING SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 10) TORQUE AN3 HARDWARE TO 20-25 IN-LBS
- 11) TORQUE AN4 HARDWARE TO 50-70 IN-LBS

APPROVED

DESIGN	AP	DART AEROSPACE LTD	
DRAWN	AP	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D119-796-021	SHEET 4 OF 4
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	STD GEAR WITH STD WEARPADS	NTS
DATE	15.04.01	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

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